

Appln No. 09/882,351

Amdt date December 27, 2004

Reply to Office action of August 26, 2004

### REMARKS/ARGUMENTS

In the Final Rejection dated August 26, 2004, the examiner rejects claims 1, 2, 4, 7-14 and 17-23 under 35 U.S.C. § 103(a) as allegedly unpatentable over Rourke, et al. (U.S. Patent No. 4,720,910) in view of Shackle (U.S. Patent No. 6,174,623). In making this rejection, the examiner admits that Rourke fails to teach that the conductive filler can comprise a combination of carbon black and a second conductive polymer, as presently claimed. To remedy this deficiency, the examiner relies on a statement in Shackle that a co-pending application (U.S. Patent No. 5,418,089 to Chaloner-Gill, et al.) discloses the replacement of carbon black with a conductive polymer. However, Chaloner-Gill expressly states that "[t]he conductive polymer replaces *all* of the typically present electroconductive material including, by way of example, graphite, powdered carbon, powdered nickel, metal particles and the like." (Column 7, lines 11-15)(Emphasis added).

In addition, Chaloner-Gill seeks to develop a cathode paste having "lightweight materials which can be cast into a smooth even coating or film." (Column 2, lines 53-55; Column 11, lines 65-68). These lightweight materials "replac[e] the carbon." (Column 3, lines 13-15; Column 7, lines 11-15). Accordingly, Chaloner-Gill neither teaches nor suggests the *partial* replacement of carbon with a conductive polymer. Rather, Chaloner-Gill expressly teaches away from such a partial replacement.

The examiner also rejects claims 1, 2, 7, 8-13 and 17-23 under 35 U.S.C. § 103(a) as allegedly unpatentable over Rourke in view of Amano, et al. (U.S. Patent No. 6,235,433). Amano, however, discloses the use of carbon black and a conductive polymer as *alternative* electric conductivity aids. (Column 10, lines 41-47). Amano describes a positive electrode made from a mixture of a positive electrode active substance, for example, LiMnO<sub>2</sub>, and a proper binder. (Column 10, lines 38-41). Amano continuously refers to this combination as "the mixture." (Column 10, lines 38-47). At Column 10, lines 41-45, Amano suggests that "the mixture" can include an "electric conductivity aid such as proper carbonaceous fine particles such as acetylene carbon black, etc." Then, in a separate sentence, Amano suggests that "the

**Appln No. 09/882,351**

**Amdt date December 27, 2004**

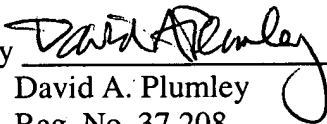
**Reply to Office action of August 26, 2004**

mixture" can contain "an electric[ally] conductive polymer." (Column 10, lines 38-47). Because "the mixture" refers only to the positive electrode active substance and the binder, this sentence does not teach the combination of carbon black with a conductive binder. Rather, it suggests that the two materials may be used as *alternatives* to one another. Accordingly, independent claims 1 and 14, and all claims dependent therefrom, including claims 2, 4, 7-13 and 17-23, are allowable over Rourke in view of Shackle, Chaloner-Gill or Amano.

In light of the above remarks, applicant submits that all of pending claims 1, 2, 4, 7-14 and 17-23, as amended, are in condition for allowance. A timely indication of allowance is therefore requested. However, if there are any remaining issues that can best be addressed by telephone, the examiner is asked to contact applicant's attorney at the number below.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By   
David A. Plumley  
Reg. No. 37,208  
626/795-9900

LES/les

LDB PAS598569.1-\* -12/27/04 1:27 PM